

STDN DAILY REPORT FOR GMT DAYS 27, 28, and 29 NOVEMBER 2000

Part I. Operations

27 NOVEMBER

A.SN Anomalies:

1. TERRA Support

27/0140-0304Z

TERRA was unable to command through TDS SSA forward LI "D". TERRA requested CSC to GCMR LI "D" to "B" and TERRA verified commands and telemetry through EDOS and GSIF. TERRA investigating configuration at EDOS and GSIF and noted this is not a generic Matrix Switch problem. TTR # 23218

TDS SSAF-2 0140-0203Z 5 Min.50 Sec. Svc/Loss TDS SSAF-2 0303-0328Z 1 Min. 07 Sec. Svc/Loss

B.ISS/ECOMM Anomalies:

1. WGS/ISS

27/1247-1256Z

Poor communication with ISS Spacecraft following AOS. Both tracking computers associated with the VHF-1 system halted, causing the antenna to halt. Both systems were rebooted to clear the anomaly. TTR # 23222 CDS ID # 17535

1247-1256Z 9 Mins Svc/Data Loss (Recov unknown)

C. GN Anomalies:

1. AGS/FAST Support

27/0212-0215Z

At AOS Operator notice that the Bit Syncs were not locked. Support was a Fast (PCL) support so Tots Operator asked TM personnel to switch full support to LEOT. Upon troubleshooting Operator discovered the Analog Switch was indicating a Time Out condition. Operator rebooted Master Computer to get control. Reloaded the Analog Switch configuration to Fast and still had the same problem. Operator then proceeded to recycle power off and on the digital switch and reloaded the switch configuration file again. This time the analog switch operated correctly and the Bit Syncs locked up. Approximately the first 10 minutes of data was not recorded on tape due to the fact the Bit syncs not being locked. TTR # 23219 CDS ID # 17533

0212-0242Z 3 Min. Svc/Data Loss (Non-Recov)

2. WGS Operator Error/SNOE

27/1611-1622Z

Due to a system anomaly the operator inadvertently deleted the scheduled pass and re-added it with the wrong orbit number. TTR # 23223 CDS ID # 17536

1611-1622Z 11 Min. Svc/Data Loss (Recov)

3. AGS/ACR Support

27/1622-1634Z

PTP-1 card 3 failed during activation. Operator attempted to manually configure serial output card for board #3, but PTP-1 would not allow this to take place. POCC was unable to command during this support. All systems were rebooted postpass. This cleared the anomaly. TTR # 23224 CDS ID # 17537

1622-1634Z 12 Min. Svc/Data Loss (Recov)

D. WSC completed delivery of Software 00004 to WSGT and the WART on 11 November 2000 at 2057Z. SSI 021 issued on 27 November 2000 authorizing SW 00004 as operational.

28 NOVEMBER

- A. SN Anomalies None.
- B. ISS/ECOMM Anomalies None.
- C. GN Anomalies:
 - 1. WGS/EO-1 Support

28/0305-0307Z

The 11 Meter Antenna began to oscillate in azimuth when elevation was approximately 42 degrees. This caused the X-band AGC's to fluctuate severely with X-band dropouts. Operator manually selected S-band autotrack and the antenna stabilized as did the X-band AGC's. Cause of oscillation is unknown. TTR # 23227 CDS ID # 17546

0300-0312Z 2 Min. Svc/Data Loss (Recov)

2. AGS/EO-1 Support

28/0449-0502Z

Master Computer failed to push prior to AOS the SCC hung and the software had to be restarted. Also the Analog and Digital switches did not configure. At AOS the PTP, Metrums and TDF failed to start. The DQM also failed to start at AOS reason unknown. Equipment was manually started. TTR # 23225 CDS ID # 17544

0449-0502Z 36 Sec. Svc/Data Loss (Non-Recov)

3. AGS/TOMS-EP Support

28/1033-1047Z

The HP exciter would not stop sweeping. Commands from the backup master resulted in time out errors. Operator performed a power cycle of the exciter, IEEE converter and the MARCONI 2305 which restored the system to normal operations. The MARCONI 2305 had the IEEE bus tied up. The tracking data for the pass is invalid due to the U/L frequency shift. No D/L data was lost. No commands were received from the PROJECT for this support. TTR # 23226 CDS ID # 17545

1033-1047Z 14 Min. Svc/Data Loss (Recov)

4. WGS/SEAWIFS Support

28/1645-1658Z

Following the start of this support, the TOTS antenna failed to move. Operator tried to go to program track and back to autotrack with negative results. Troubleshooting is in progress. TTR # 23228 CDS ID 3 17548

1645-1658Z 13 Min. Svc/Data Loss (Recov)

5. AGS/EO-1 Support

28/1954-1956Z

The x-band signal was on at the stations horizon, but the spacecraft antenna was pointed to SGS. This resulted in poor data quality being received at AGS at the beginning of the pass. The station observed spikes in the antenna elevation angles with a magnitude of +1.1 degrees. This resulted in the antenna switching between x-band and s-band autotrack and program track. This anomaly continued until the operator forced the antenna into s-band autotrack at 19:55:23Z. The antenna was configured back to x-band autotrack at 19:55:33. The antenna continued to track the x-band signal through the remainder of the support. TTR # 23229 CDS ID # 17552

1951-2003Z 36 Sec. Svc/Data Loss (Non-Recov)

6. AGS/EO-1

28/2130-2134Z

The antenna began switching between s-band, x-band and program track. The operator forced the antenna to s-band autotrack and remained in this configuration through the end of the pass. TTR # 23230 CDS ID # 17553

2129-2142Z 2 Min. 53 Sec. Svc/Data Loss (Non-Recov)

7. PF1/LSAT-7 Support

28/2012-2027Z

The multi-mission receiver was not configured properly due to

an operator error. Datalynx was configured for commanding, but was not able to be reconfigured for receipt of x-band in time. The problem was identified and solved before support of the next pass. TTR # 23235 CDS # 17559

- D. NAM-497 issued for STGT Software Delivery 00004 to take place on December 15, 2000 between 1105-1505Z.
- E. TDE Stationkeeping maneuver was completed successfully.

29 NOVEMBER

- A. SN Anomalies:
 - 1. BRTS/C1313 Support

29/1236-2026Z

The 6 BRTS events failed to acquire lock on the MA and SSA antennas. This is an ongoing anomaly,under investigation. TTR # 23232

- B. ISS/ECOMM Anomalies None.
- C. GN Anomalies
 - 1. MGS/SAC-C Support

29/1555-1609Z

MGS received corrupt ephemeris via e-mail from the project. This caused the antenna system to attempt to track in negative elevation and not acquire AOS. After attempted track, the ephemeris from the prior day was reentered to replace the corrupt ephemeris and AOS/LOS times, maximum elevation, and start/stop azimuth were verified with CMOC for quality. Data should be recovered on the next orbit.

TTR # 23233 CDS # 17557

14 minutes service/data loss recoverable

2. WGS/EO1 Support

29/1409-1418Z

After WGS acquired AOS, approiximately 2 minutes later the site noticed that the carrier did not come up. The site tried to manually bring it up but they were unsuccessful. WGS noticed that the HPA was putting out very little power. The carrier was brought up after several attempts, however only 30 seconds was left in the pass. Reason for problem unknown. TTR # 23234 CDS # 17558

1407-1418Z 9 minutes service loss

3. AGS/FAST Support

29/1940-2012Z

IEEE bus hung, causing sweep to be continuous. Connection dropped to project at "go for command". Connection manually made to project by operator. Project reported no receiver lock with spacecraft. A re-sweep was reinitiated and connection was dropped and re-established to the project. The re-sweep took too long to allow commanding. TTR # 23236 CDS # 17560

32 minutes service/data loss unknown if recoverable

4. WGS/SEAWIFS Support

29/1728-1742Z

The 11 meter antenna stopped at -2.4 degrees elevation instead of 0.0. The operator received 2 error messages. A minute past AOS the operator deselected autotrack, the antenna moved several degrees and a signal was seen. Operator went to program track, back to autotrack and the remainder of the pass was nominal. TTR # 23237 CDS # 17562

4 mins 45 secs service/data loss non-recoverable

Part II. Testing Anomalies

A. SN Test:

1. SN/ULDB Data Flow

29/1500-1700Z

NCC/ULDB POCC/NASCOM

Objectives:

- A. Verify forward and return link data interfaces between the WDISC PTP and ULDB POCC.
- B. Verify forward link failover capability.

Results: Objective Partially Met.

Remarks:

Forward and return connectivity was established between the WDISC and ULDB POCC however, socket connections were intermittent. Command and telemetry data flow was unsuccessful. Command failover capability was not tested. Problems are under investigation.

B. GN Test - None.

Part III. Equipment Status Changes: - None.

Part IV. Scheduled Activities:

TERRA/ERPS Parallel Operations Test 23/1415-12/15/2400Z

KNOC AND SKS TERRA GSIP Data Capture Test 30/1500-1700Z

ULTRA LONG DURATION BALLOON Engineering Test
30/1500-2100Z

Part V. Launch Forecast Changes

*1.) J0218LS (DELTA/GENESIS) NET 06 JUN.,2001 T-0 = UNKNOWN